



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

February 16, 2012

Rick Brazell, Forest Supervisor
Nez Perce and Clearwater National Forest
12730 Highway 12
Orofino, Idaho 83544

Re: EPA Region 10 Review of the Upper Lochsa Land Exchange Supplemental Draft Environmental Impact Statement. EPA Project Number: 08-068-AFS.

Dear Mr. Brazell:

The U.S. Environmental Protection Agency (EPA) has reviewed the Supplemental Draft Environmental Impact Statement (SDEIS) for the Upper Lochsa Land Exchange on the Clearwater, Nez Perce and Idaho Panhandle National Forests in Idaho. Our review of the SDEIS was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review considers the expected environmental impacts and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

Previously, the EPA reviewed the Draft EIS for this project and submitted comments on February 22, 2011. In our comment letter, we indicated support for the preferred alternative (Alternative D). We strongly support bringing the land in the upper Lochsa under Forest Service Management, as a way to bring all of the parcels in the upper Lochsa up to Forest Plan standards, benefitting habitat for a number of sensitive species including bull trout and lynx. It would also lessen turbidity and improve runoff water quality in a drainage that is important for a broad range of aquatic resources and recreation.

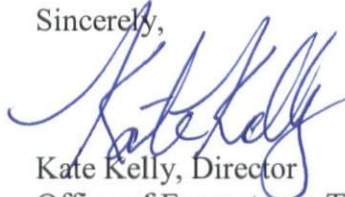
The EPA continues to support the land exchange concept. We do not, however, support the alternative analyzed in the SDEIS (Alternative F). Alternative F would pursue an "acre-for-acre" approach to the exchange. This would result in the transfer of 39,371 acres of Forest Service land in the South Fork Clearwater and Salmon River drainages to Western Pacific Timber (WPT). The aquatic resources of the South Fork Clearwater and Salmon River subbasins are recognized as uniquely valuable. The South Fork Clearwater subbasin is also subject to total maximum daily loads (TMDLs) to address temperature and sediment impairments. The Nez Perce National Forest Plan recognizes the inherent aquatic species potential of these subbasins, and the importance of protecting and restoring water quality. Our analysis indicates that managing these parcels under a less protective management strategy (Idaho Forest Practices Act) would affect water quality and hinder the achievement of TMDL targets.

Our analysis also identified concerns related to the handling of grazing permits, impacts to Nez Perce Tribe treaty rights, and consistency with the Snake River Basin Adjudication process. Lastly we recommend additional economic analysis in recognition of potential changes to the availability of big

game for hunters, special forest products and view-based recreation. Our attached comments provide details on each of these concerns.

We have rated this SDEIS as EO-2 (Environmental Objections – Insufficient Information). This rating is principally based on our concern that Alternative F would move nearly 75 miles of stream into a less protective management strategy. Our analysis indicates that moving management of these streams to the Idaho Forest Practices Act could degrade water quality and hinder achievement of TMDL targets. An explanation of our rating is attached. We appreciate the opportunity to provide comments, and I encourage you to contact Teresa Kubo of my staff with any questions at (503) 326-2859 or kubo.teresa@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kate Kelly", is written over the printed name.

Kate Kelly, Director
Office of Ecosystems, Tribal and Public Affairs

**EPA Region 10 Comments on the
Supplemental Draft EIS for the
Upper Lochsa Land Exchange**

Water Quality

The EPA agrees with the conclusions in the SDEIS as they relate to water quality in the upper Lochsa drainage. As the parcels in the upper Lochsa are brought up to Forest Plan standards, there should be significant improvement to water quality (temperature, turbidity and runoff). We have serious concerns, however, with the analysis of impacts to water quality on the lands conveyed to Western Pacific Timber under Alternative F. As detailed below, we believe the analysis does not accurately characterize potential temperature or sediment impacts.

Shade/Temperature

Page 67 of the SDEIS states that there are no 303(d) listed streams on the National Forest exchange parcels. This is accurate, however it should be noted that the South Fork Clearwater River (SF CWR) has Total Maximum Daily Loads (TMDLs) in place in order to address sediment and temperature impairments. It should also be noted that the SF CWR TMDL includes shade targets for all 74 water bodies within the subbasin.

We raise this as an issue because we do not believe transferring the identified lands within the SF CWR basin to private ownership and management under the Idaho Forest Practices Act(IFPA) will advance TMDL restoration goals. The EPA has completed a comparative analysis of federal and state riparian management strategies (PACFISH/INFISH and IFPA respectively). We focused this analysis on the National Forest Land within the Lightning Creek drainage because Lightning Creek is a tributary to the SF CWR, is included in the temperature TMDL, is representative of the drainages encompassed within the exchange area, and because most of the drainage is proposed for transfer to WPT under Alternative F.

Our analysis considered the number of riparian acres receiving some protection under each of the strategies, how riparian buffers would be applied under each of the strategies, and the associated shade response. Our results are summarized below.

Table 1: Comparison of Riparian Management Strategies in the Lightning Creek Drainage (Tributary to the South Fork Clearwater River)

Stream Group	Riparian acres receiving protection under IFPA	Riparian acres receiving protection under PACFISH/INFISH
Class 1* – Between 10' and 20' wide	39.3	402.6
Class 1 – Less than 10' wide	28.3	
Class 2** draining into Class 1	66.1	120.0
Class 2 draining into Class 2	0.4	
Total	136.3 acres	522.6 acres

* Class I streams are used for domestic water supply or are important for the spawning, rearing or migration of fish.

** Class II streams are usually headwater streams or minor drainages that are used by only a few, if any, fish for spawning or rearing.

In other terms, the percentage of area designated as “riparian” for Nez Perce National Forest managed lands in the Lightning Creek Subbasin under PACFISH/INFISH is 15.3%, whereas the percentage of area designated as “riparian” under IFPA would be 3.9%.

Figures 1 and 2 depict how these strategies would be applied within the Lightning Creek drainage.

Fig 1: IFPA buffers on Lightning Cr.

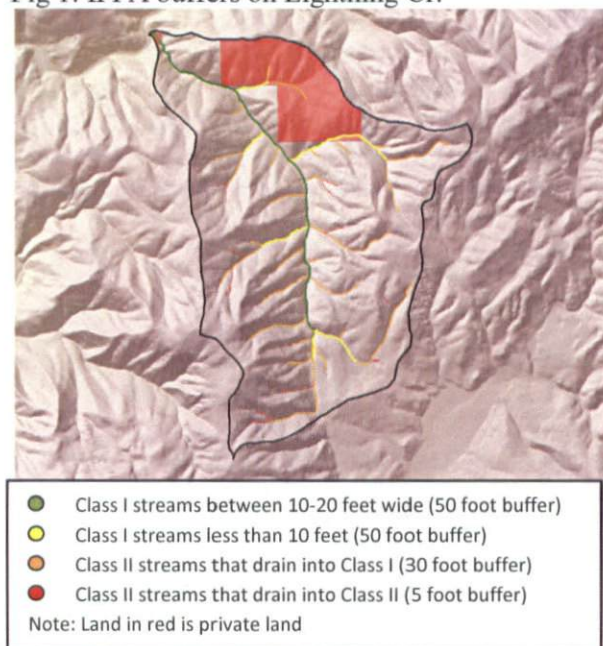
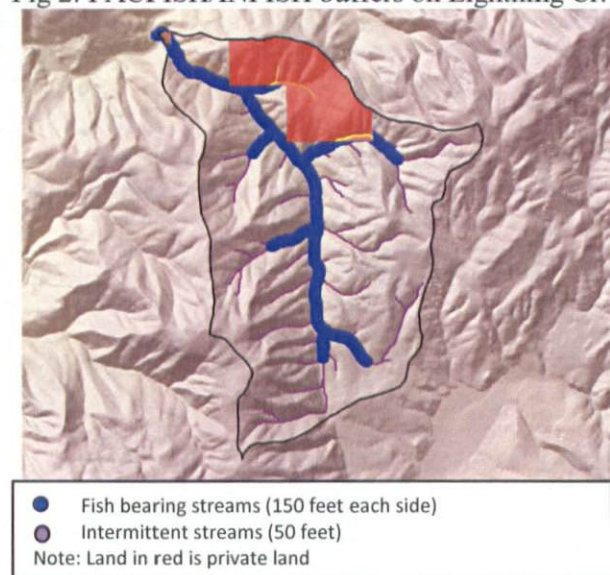


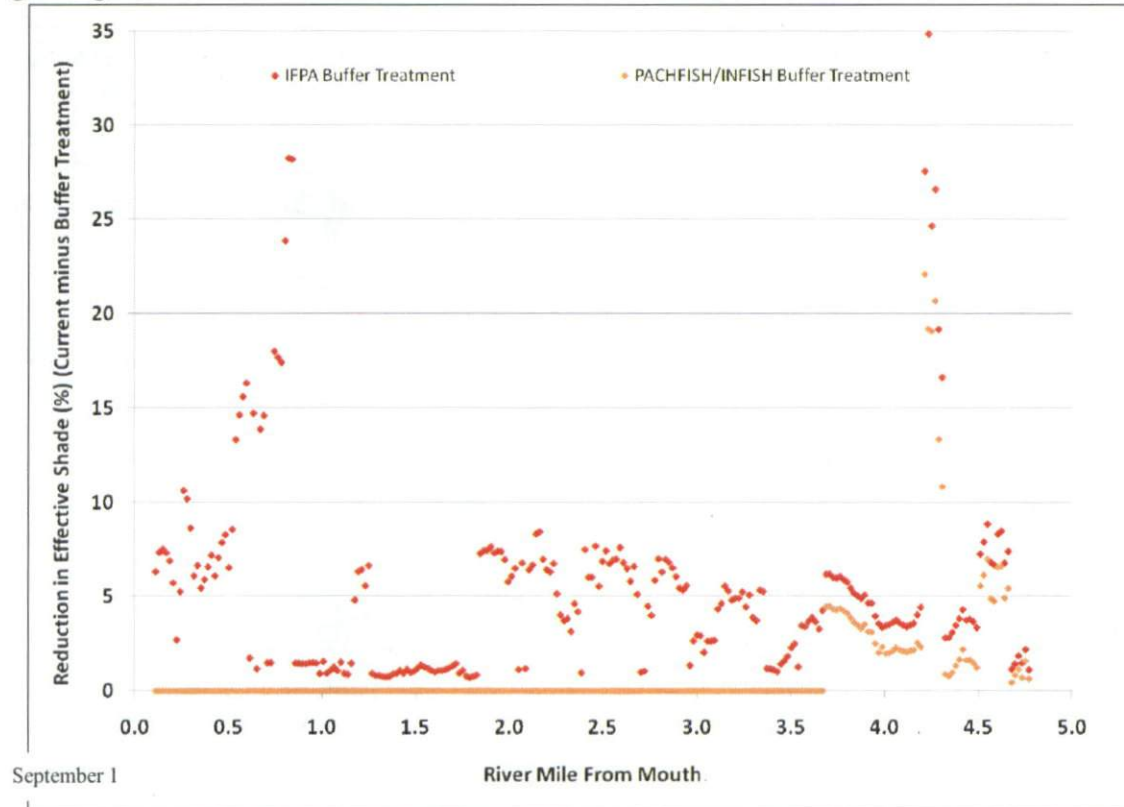
Fig 2: PACFISH/INFISH buffers on Lightning Cr.



We applied a shade model to the mainstem of Lightning Creek. In this modeling exercise we assumed the buffers outlined in Figures 1 and 2 above. In order to simplify this modeling effort we did not assume any management (i.e. thinning) within those buffers. Area outside the buffer was assumed to be clearcut. Our results indicate that for the mainstem of Lightning Creek, management under IFPA would result in a reduction in shade relative to management under PACFISH/INFISH. Figure 3 depicts the

relative percent reduction in effective shade on Lightning Creek under PACFISH/INFISH and IFPA on September 1.

Figure 3: Percent Reduction in Effective Shade under PACFISH/INFISH and IFPA on Lightning Cr.



Although we did not assume management within the buffers, management can occur, and management strategies differ significantly between IFPA and PACFISH/INFISH. Under IFPA, the requirement for Class 1 streams is to leave 75% of current shade, even if the current shade levels are already compromised by past timber management within the streamside protection zone (SPZ). Also under the IFPA, no retention of trees greater than 20 inches diameter at breast height (dbh) is required within the SPZ for Class I fish-bearing streams that are less than 20 feet wide. Only four trees greater than or equal to 20 inches dbh must be retained per 1000 lineal feet of Class I streams that are greater than 20 feet wide. Under PACFISH/INFISH, the direction is to manage toward potential natural vegetation (PNV). PNV was used as a basis for TMDL targets that have been established for every waterbody in the subbasin. Many of the water bodies within the exchange parcels are targeted for an increase in canopy closure of between 25 and 50 percent.¹ Adopting a management strategy that allows for potential decreases in shading would not be consistent with the direction set out in the TMDL implementation strategy.

¹ Idaho Department of Environmental Quality. 2003 South Fork Clearwater River Subbasin Assessment and TMDLs. Figure G-10 Percent Canopy Closure Increase Needed in the Forested Areas of the SF CWR Subbasin Located at http://www.deq.idaho.gov/media/453550-_water_data_reports_surface_water_tmdls_clearwater_river_sf_clearwater_river_sf_entire.pdf

This is significant because according to the SF CWR TMDL, much of the excess heat loading in the upper main stem of the Clearwater River is the result of loading from the headwater tributaries. Page 160 of the TMDL states:

“...Human caused heat loading measured in the tributaries is largely a result of the loss of shade from riparian vegetation from such activities as grazing, road construction, dredge mining, and timber harvest. The influence of shade on stream temperature is much more significant on smaller streams with smaller water volumes than larger streams. In addition, tributaries are often locations of lower observed stream temperatures within the SF CWR Subbasin; therefore, protecting these tributary source areas, even if they are currently below the criteria, will reduce the cumulative temperature effects on the main stem. The management of tributary conditions is the most effective method to reduce stream temperature in the main stem.”

Recommendations:

- We recommend that the FSEIS include an analysis of water quality impacts that crosswalks shade targets established in the SF CWR TMDL with the management prescriptions that would be applied in riparian zones under the IFPA and PACFISH/INFISH.
- Where shade targets cannot be achieved, we recommend that parcels be removed from consideration for exchange, or be subject to a term of exchange that would require greater riparian protection to meet SF CWR TMDL targets.

Roads/Sediment

Addressing sediment has been identified as a priority in both the Salmon and SF Clearwater drainages. The South Fork Clearwater Landscape Assessment² states that the restoration priority for the river is high, and that restoration should focus on stream/riparian processes and the sediment regime. Page 132 of the assessment makes the following recommendation:

“The primary focus ... needs to be the sediment regime, principally the upland sediment sources and activities that increase the risk of mass movement or debris torrents. The existing roads in this area need to be a central focus in achieving this restoration objective.”

The SF CWR TMDL also emphasizes the importance of addressing sediment from roads. The exchange parcels on the SF CWR are located within the area analyzed as Water Body 12 (WB 12) in the TMDL. Our review of the TMDL data indicates that WB 12 has one of the highest levels of road-related mass failure rates (28 in 15 years) resulting in one of the highest mass failure sediment rates (381 tons/WB/year).³ Overall, the area containing the exchange parcels is characterized within the TMDL as Landform Group (LFG) 3: Breaklands-Gneiss, Quartzite, Schist, and Granite. According to the TMDL, this LFG is subject to high erosion hazard, and high sediment delivery efficiency. The TMDL also notes that channel scour, colluviation, and mass wasting are important landforming processes within this LFG.

In recognition of these factors and recommendations, the Nez Perce National Forest has consistently sought opportunities to address problem roads and to reduce road densities. We recognize that the Idaho Forest Practices Act addresses road construction, reconstruction and maintenance. It is important to

² http://www.fs.usda.gov/detail/nezperce/landmanagement/planning/?cid=fsm91_055835

³ IDEQ, 2003. South Fork Clearwater River Subbasin Assessment and TMDLs. Table L-5 Sediment from road-related mass failures. Located at <http://www.epa.gov/waters/tmdl/docs/SF%20Clearwater%20River%20TMDL.pdf>

recognize, however, that under IFPA road density reduction and management would not be prioritized as they have been under Forest Service management. As noted on page 67 of the SDEIS, road densities on the WPT lands in the upper Lochsa (which have been managed in accordance with IFPA) average 6.1 miles per square mile and represent a major restoration concern. Given these factors and the importance of addressing sediment within the SF CWR, it is not clear why the SDEIS did not consider potential impacts associated with an increased road density within the parcels that would be transferred to WPT.

Recommendations

- We recommend that the FSEIS consider potential sediment impacts associated with an expanded road network within the parcels transferred to WPT. That analysis should assume a road density similar to the nearest private forest land and should consider land form type, topography, and projected sedimentation rates.
- Should impacts be identified, mitigation measures should be required (such as a road density target for the exchanged lands).

Nez Perce Tribe Treaty Rights

As noted in the DSEIS, the entire SF CWR subbasin is Nez Perce Tribal ceded land. As such, under Article 3 in the Nez Perce Treaty of 1855, tribal members are secured the rights of taking fish in all usual and accustomed places, erecting temporary buildings for curing, hunting and gathering, and pasturing cattle and horses upon open and unclaimed land. Further, numerous Nez Perce religious and cultural sites are identified and protected in the subbasin. Because Alternative F would affect where in the basin tribal members could exercise treaty rights, impacts to treaty rights should be fully explored. We recognize that the Forest Service is pursuing a cultural resources consultation process and government-to-government consultation with tribal leadership. We encourage the Forest to include the results of this process in the FSEIS.

Snake River Basin Adjudication

The DSEIS discusses provisions of the Snake River Basin Adjudication (SRBA) as it pertains to tribal water rights. It does not, however, consider implications for the other program elements identified in the SRBA Mediators Term Sheet.⁴ Page 2 of the Term Sheet states that "The State of Idaho will implement a Salmon and Clearwater Habitat Management and Restoration Initiative for the conservation and restoration of habitat within the Salmon and Clearwater River Basins." One component of that initiative is the "Idaho Forestry Program," which is intended to provide additional short and long-term conservation benefits for listed fish species. Per the Term Sheet, the program will do this by establishing riparian protections for state and private land greater than those found under the IFPA. Enrollment of private land in this program would be voluntary. We believe that transferring land in the Clearwater and Salmon River basins from more protective federal ownership to less protective private ownership, without stipulating future enrollment in the Idaho Forestry Program would be inconsistent with the overarching direction laid out in the SRBA.

Recommendation:

- To be consistent with the SRBA, we recommend that any parcels moving from federal to private ownership within the Salmon or Clearwater basins be enrolled in the Idaho Forestry Program once that program is established and approved by the National Marine Fisheries Service. This could be included as a term of exchange.

⁴ http://www.idl.idaho.gov/eis/mediator_term_sheet/FWSposted_SRBA_TermSheet.pdf

Grazing

As noted in the SDEIS, 14,136 animal unit months (AUMs) would be affected by Alternative F. This would require changes to allotment management plans, moving some permittees, and canceling some permits. It is not clear whether this would result in a reduction in AUMs, or if this would result in grazing activity being relocated to other allotments. We support careful management of grazing, and we are concerned that Alternative F may remove grazing allotments from areas well suited for grazing, and potentially intensify use in areas less well suited for grazing. This could have implications for water quality. The SF CWR TMDL notes that grazed areas are a significant sediment source. Sediment loadings from agricultural and grazing areas are on the order of 10-30 times natural background (per water body). For this reason, the TMDL recommends the adoption of best management practices that include reducing the concentration of animals and rotational grazing.⁵

Recommendation:

- We recommend the FSEIS analyze potential implications for adjacent grazing allotments and any attendant potential for impact to water quality.

Economics

We concur with the conclusions in Section 3.7 of the SDEIS as they relate to County revenues and employment projections. What appears to be lacking, however, is an assessment of impacts to the economies of potentially affected communities, such as Riggins, Lucile, and Grangeville. User groups such as mushroom hunters, game hunters, and recreationists have an influence on the economies of these communities. As noted on page 105 of the SDEIS, Alternative F would result in a loss of 39,120 acres of winter range for big game. That factor, in concert with an increase in roads, could affect big game numbers. Open road density is known to influence bull elk mortality significantly. It is also known to be negatively correlated with the percent of bull elk living to maturity.⁶ It is reasonable to expect that this could affect local revenues associated with hunting. Similar assumptions could be made where mushroom habitat would be affected, or where scenic integrity is altered near recreation areas or popular driving corridors.

Recommendation:

- We recommend that Section 3.7 include a discussion of potential impacts to local economies resulting from potential changes in the availability of special forest products (such as mushrooms), big game, and scenic vistas.

⁵ IDEQ 2003. South Fork Clearwater River Subbasin Assessment and TMDLs. Available at <http://www.epa.gov/waters/tmdl/docs/SF%20Clearwater%20River%20TMDL.pdf>. Page 229.

⁶ USDA Forest Service. 1993. Elk Management in the Northern Region : Considerations in Forest Plan Updates or Revisions. GTR INT-303. Available at: http://www.fs.fed.us/rm/pubs_int/int_gtr303.pdf

**U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action***

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.